

Prospects

for Queensland's Primary Industries

2007-08

Forecasting, analysis & trends

September 2007



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Acknowledgements

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General disclaimer

The Department of Primary Industries and Fisheries (DPI&F) seeks to maximise the economic potential of Queensland's primary industries on a sustainable basis.

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Contents

Tables	iv
Figures	iv
Important changes in this edition of <i>Prospects</i>	v
Summary of key findings	vii
Introduction	1
About <i>Prospects</i>	1
About <i>Prospects update</i>	1
Content and procedure	2
Drought situation	3
Climate forecast for spring/summer/autumn of 2007–08	4
Global demand for Australian commodities	5
Volume of production index	8
Livestock disposals	9
Cattle and calves	9
Queensland’s grazing property values	15
Pigs	17
Poultry	18
Sheep and lambs	19
Livestock products	20
Milk	20
Wool	24
Eggs	25
Crops	26
Horticulture crops	26
Fruit and nuts	26
Vegetables	29
Lifestyle horticulture	31
Other crops	34
Sugarcane	34
Cotton	37
Other major field crops	40
Winter cereal grains	41
Wheat	41
Barley	42
Summer cereal grains	43
Grain sorghum	43
Maize	43
Fisheries	45
Wild-harvest fisheries	45
Aquaculture	48
Forestry	50
Special feature—the economic effects of the equine influenza outbreak on Queensland’s economy	53
Notes	54
Glossary	55

Tables

Table 1.	Gross value of production, first-round processing and total primary industries estimates and forecasts 2005–06, 2006–07 and 2007–08	6
Table 2.	Volume of production index for Queensland’s major agricultural commodities 1996–97 to 2007–08	8
Table 3.	Queensland milk production estimates and forecasts by region 2005–06 to 2007–08	20
Table 4.	Lifestyle horticulture value 2006–07 to 2007–08	33
Table 5.	Major industry segments and economic contribution	53

Figures

Figure 1.	Drought situation in Queensland as at 31 August 2007	3
Figure 2.	Probability of exceeding median rainfall for September–October based on rapidly rising phase during July–August 2007	5
Figure 3.	Cattle and calf slaughterings in Queensland 2001–02 to 2007–08	9
Figure 4.	Eastern Young Cattle Indicator (EYCI)	10
Figure 5.	Cattle in Queensland and New South Wales feedlots (March quarter 2001 to June quarter 2007)	11
Figure 6.	Queensland live-cattle exports 1995–96 to 2007–08	14
Figure 7.	North Queensland cattle station values (\$/hectare)	16
Figure 8.	Farmers feeling positive about industry future (% of farms)	21
Figure 9.	The Australian Dairy Industry Value Chain	22
Figure 10.	Farmers reporting they were affected by drought (% of farms)	22
Figure 11.	Gross value of cotton production 1997–08 to 2007–08	37
Figure 12.	Status of major water storages in Queensland’s cotton growing regions	38
Figure 13.	Queensland wheat production by region 2005–06 to 2007–08	41
Figure 14.	Queensland barley production by region 2005–06 to 2007–08	42

Important changes in this edition of *Prospects*

Prospects is now in its seventh year, after its official launch in June 2001. In this September 2007 edition, we are pleased to introduce some significant changes to improve its coverage of Queensland's primary industries and its usefulness to users.

Total value of Queensland's primary industries

The most significant change in this issue of *Prospects* is the way the value of Queensland's primary industries is reported.

Previously, the measure used to value Queensland's primary industry commodities in *Prospects* was gross value of production (GVP).

From this issue onwards, the **total value of Queensland's primary industry commodities** reported in *Prospects* will comprise two components, which are separately reported. These are:

- a forecast gross value of production figure
and
- a forecast of value added in first-stage processing for the commodities listed below.

Forecast value of first-stage processing

First-stage processing forecasts are provided for:

- meat processing
- sugar processing
- milk and cream processing
- fruit and vegetable processing
- flour mill product and feed processing
- seafood processing
- log sawmilling and timber dressing and plywood and veneer manufacturing
- lifestyle horticulture services
- cotton ginning.

This change will have an impact on the gross value of production figures for 2005–06 and 2006–07 for the lifestyle horticulture and forestry industries, as some of the value previously captured under *gross value of production* is now represented under *first-round processing value added* in Table 1 (page 6).

In previous editions of *Prospects*, the lifestyle horticulture industry was defined as 'businesses involved in the production of non-food horticulture products and planting stock for fruit, vegetable and forest industries', including:

- ornamental (plants and bulbs), fruit and forestry plants
- cut flowers and foliage
- turf grass

and a range of services including:

- landscape design, contracting and maintenance (including arboriculture) services
- wholesale and retail sales of lifestyle horticulture products and services
- parks, gardens, golf course and indoor plant establishment and maintenance
- technical horticultural advice, information dissemination and project management.

In this edition of *Prospects*, in Table 1 (page 6), *lifestyle horticulture* has been replaced with *amenity horticulture*, which includes nurseries, cut flowers and turf. The remainder of the value of the industry is captured under 'lifestyle horticulture services' in the 'first-round processing value added' section of Table 1.

Similarly, since September 2004, *Prospects* has used the turnover of log sawmilling and timber dressing activity in Queensland as an indicator of gross value of forest industry activity. In this edition of *Prospects*, gross value of production relates to the value of the log timber produced from Queensland's plantations and native forests **before** it reaches a sawmill or primary timber processing plant. The value added component of the forestry industry has been recorded under the heading 'log sawmilling and timber dressing and plywood and veneer manufacturing' in the 'first-round processing value added' section of Table 1 (page 6).

Comparisons with previous years

In 2005–06, the Australian Bureau of Statistics (ABS) used a new methodology for gathering agricultural data. ABS's final gross value of production estimates for 2005–06 are due for release in March 2008 and, if available in time, these figures will be updated in the June 2008 edition of *Prospects update*. Due to this break in the series, ABS advises that figures from 2005–06 should not be compared to previous years.

Maps showing main production regions

In this edition of *Prospects*, maps are included that indicate the *main* production areas for particular commodities. The maps are based on ABS 2001 Agricultural Census data, which are the most current location data. The maps will be updated when new ABS Agricultural Census data are released. The maps show where the top 80% of production by volume occurs for each commodity by Statistical Local Area (SLA). Entire SLAs are highlighted to indicate the location, rather than the physical area of production.

Productivity growth driven by innovation

DPI&F is the leading public sector agency supporting agricultural innovation in Queensland. This is complemented by significant contributions from CSIRO, the university sector and industry.

In this edition of *Prospects*, we highlight the many ways DPI&F is using innovation to drive growth in primary industries including:

- commercialisation of vaccines to reduce the impact of bovine respiratory disease in feedlot enterprises (page 12)
- research into micro-organisms in the stomachs of cattle to ensure the most effective and efficient bacteria are present when cattle are on a variety of feeds (page 13)
- breeding programs to improve productivity and quality of Queensland's mangoes (page 28)
- developing the grains industry through plant breeding programs that integrate recent developments in molecular biology, biotechnology, physiology, agronomy and virtual plant modelling (page 44)
- using science to manage and sustain Queensland's wild fisheries resources (page 49)
- advanced bio-science research supporting the expansion of Queensland's hardwood plantations (page 52).

Special feature articles

This edition of *Prospects* includes a special report on the economic effects of the equine influenza outbreak on Queensland's economy (page 53).

Other feature articles recognise:

- Judy Plath, the 2006 winner of DPI&F's Elaine Brough Award (page 36)
- Paul Grundy, the Australian Cotton Industry Awards Young Achiever of the Year 2007 (page 39).

Summary of key findings

Total value of Queensland's primary industries

In 2007–08, the total value of Queensland's primary industry commodities (including gross value of production and first-stage processing) is forecast at \$12.235 billion, which is 1% higher than 2006–07 and 2% lower than 2005–06.

Key points

Gross value of production ('farm gate')

In 2007–08, the gross value of production of Queensland's primary industry commodities at the 'farm gate' is forecast at \$9.425 billion, which is 2% higher than 2006–07 and 3% lower than 2005–06.

Livestock industries

The outlook for all of Queensland's livestock industries in 2007–08 is positive, with gross value of production forecasts generally higher (or at least equal to) forecasts for the previous year. Indeed, the forecasts for some livestock industries are the highest ever reported in *Prospects*.

Livestock disposals

The gross value of production of Queensland's **cattle and calf** industry in 2007–08 is forecast at \$3.73 billion, which accounts for almost 40% of the total 'farm gate' value of Queensland's primary industry commodities. This is the highest gross value of production forecast to date. Cattle and calf slaughterings are expected to be higher than DPI&F's final estimate for 2006–07 with a slight fall in prices.

- The gross value of production of **pigs** in Queensland in 2007–08 is forecast at \$210 million. Pig production is forecast to fall by 10% in 2007–08 because of a lack of water and high feed costs.
- The gross value of **poultry** production in 2007–08 is forecast at \$255 million, which is the highest forecast to date. Increased production is being driven by increased demand from a growing population.
- Higher **sheep and lamb** prices in 2007–08 are expected to push sheep and lamb gross value up to \$55 million, which is the highest forecast since 2003–04.

Livestock products

- The gross value of **milk** production in Queensland in 2007–08 is forecast at \$230 million, which is the highest forecast since the beginning of the drought in 2002–03.
- **Wool's** gross value of production in 2007–08 is forecast at \$120 million, which is higher than the previous few years due to higher world prices.
- The gross value of **egg** production is forecast at \$100 million, which is the same as the last few years.

Crops

Fruit and nuts and vegetables:

- The total gross value of Queensland's **fruit and nut** production is forecast at \$1.095 billion in 2007–08, which is the highest forecast to date.
- **Vegetable** gross value of production is forecast to fall to \$770 million, which is 5% lower than 2006–07.

Lifestyle horticulture:

- The **total value of Queensland's lifestyle horticulture industry** is forecast at \$1.2 billion in 2007–08, which is slightly lower than 2006–07, and marks the second consecutive fall in GVP after many years of industry growth.
- The total production value of nurseries, turf, cut flowers and foliage is forecast at \$545 million. **Nursery and turf production** gross values are forecast at levels similar to 2006–07, while the gross value of production of **cut flowers and foliage** is forecast at \$105 million, which is 9% lower than 2006–07.
- On the service side, total value is forecast at \$660 million. **Retail nursery and landscape** gross values are lower than 2006–07 and are forecast at \$155 million and \$435 million respectively. **Grounds and maintenance** and **indoor plant hire** gross values are forecast to increase on the previous year, with gross values of \$299 million and \$44 million respectively.

Cereal grains:

- With the increased demand for feedgrains, and historically high world prices, wheat, barley, grain sorghum and maize gross value of production forecasts for 2007–08 are all higher than the previous year.
- **Wheat** gross value of production is forecast at \$250 million, which is 4% higher than 2006–07.
- **Barley** gross value of production is forecast at \$40 million, which is 60% higher than 2006–07.
- **Grain sorghum** gross value of production is forecast at \$340 million, which is 84% higher than 2006–07.
- **Maize** gross value of production is forecast at \$50 million, which is twice as high as 2006–07.

Other crops:

- The gross value of Queensland's **sugarcane** production is forecast at \$730 million in 2007–08, which is 32% lower than 2006–07, due to a fall in world sugar prices.
- **Cotton** gross value of production is the lowest ever forecast at \$50 million, which is 58% lower than 2006–07. Plantings are expected to be down 63% on the previous year due to the continuing dry conditions.

Fisheries

The gross value of **fisheries** production in 2007–08 is forecast at \$265 million, which is 4% higher than DPI&F's revised estimate of \$255 million for 2006–07.

Forestry

Total forest industry value is forecast at \$570 million, which is 5% higher than 2005–06. Of this, the gross value of the primary activity, **forest growing**, or **forestry and logging**, is forecast at \$210 million, which is 5% higher than 2006–07.

First-round processing

In 2007–08, the value of first-round processing (or value added production) is forecast at \$2.81 billion, which is 2% lower than 2006–07 and 1% higher than 2005–06.

- The value of **meat processing** is forecast at \$1.01 billion, which accounts for 36% of the total value of first-round processing.
- In 2007–08, the value of **lifestyle horticulture services** (which includes retail nursery, green life-related landscape, grounds and maintenance and indoor plant hire) is forecast at \$660 million.
- The forecast value of **sugar processing** in 2007–08 is \$305 million.
- The value of **log sawmilling and timber dressing and plywood and veneer manufacturing** is forecast at \$360 million in 2007–08.

Introduction

Department of Primary Industries and Fisheries (DPI&F) has a vision of *profitable primary industries for Queensland* and supports strategic development across the sector.

DPI&F delivers outcomes that maximise the economic potential of Queensland's primary industries on a sustainable basis. There is a focus on improving industry competitiveness, productivity, innovation and export earnings. Such outcomes drive growth and improve profitability.

Queensland's primary industries sector accounts for more than \$7 billion in exports, making it Queensland's second largest exporter behind the mining sector. The department is a major contributor to the government's efforts to further develop a robust and diverse decentralised economy.

About *Prospects*

Prospects has a circulation of approximately 2500, with copies distributed to members of parliament, industry associations, agribusinesses, banks, law firms, local councils, government departments, educational institutions, primary producers and other businesses along the value chain.

The annual edition of *Prospects* now contains the department's:

- initial gross value of production (GVP) forecasts for 2007–08
- gross value of production estimates for 2006–07 and 2005–06
- initial forecasts for 2007–08 for first-stage processing for the industries outlined previously.

Prospects is available on the DPI&F website at www.dpi.qld.gov.au/prospects/

About *Prospects update*

Initial gross value of production forecasts and first-stage processing forecasts for the financial year are published in the annual edition of *Prospects*. These forecasts are then updated as the year unfolds. Changes to the forecasts are reported in the subsequent December and March editions of *Prospects update* with final forecasts for the financial year provided in the June edition of *Prospects update*.

We welcome your feedback. Please send your comments and suggestions to us at:

Prospects
Policy and Investment Advice
Innovation and Biosecurity Investment
Department of Primary Industries and Fisheries
GPO Box 46
Brisbane Qld 4001

or contact the DPI&F Business Information Centre on 13 25 23.

Content and procedure

In this publication, gross value of production refers to the output of primary industry operations. Most non-commercial activities, such as home vegetable and flower gardening and hobbyist beekeeping, are not included due to a lack of data. This in no way diminishes the importance of these activities to the economy and society.

Gross values of commodities produced are calculated by multiplying the output from each primary industry activity by the average wholesale market price paid to producers. Production output resulting from primary industry activity is largely determined by the availability of resources (e.g. irrigation water), market factors, incidences of pests and diseases, and weather conditions. The market price reflects the prices paid at the point of first sale of the produce concerned. This is often referred to as the 'farm gate' price, although in many instances that point of sale is beyond the 'farm gate' (e.g. saleyard, mill door).

First-round processing activity is estimated using a methodology that assumes a constant ratio of farm output to the first processing round of value added production, and is derived using 2001–02 as a reference year (currently the only available statistics for Queensland manufacturing industries).

This methodology was chosen for its simplicity, consistency and transparency. Technology and processing margins tend to remain relatively constant over time. However, with the release of the next ABS Queensland manufacturing statistics, ratios will be updated where necessary. It is possible that some reported values are an underestimate, resulting from technology improvements since 2001–02. Likewise, industries currently processing a greater proportion of output than in 2001–02 could also lead to underestimates. Furthermore, overestimates could be expected where processing margins have tightened in relative terms since 2001–02.

Value added refers to the additional value created at a particular stage of production. Value adding that occurs beyond the first round is not included in this analysis. For some industries, there is a significant number of rounds of processing and value adding beyond the first round. For instance, timber is processed in numerous downstream industries, including wooden structural component, pulp, paper and paperboard and paper product processing.

Economists use the value added method as a way to avoid double counting (i.e. the counting of the same input twice). The sum of the value added in each of the different stages of production equals the value of the final product, the product that leaves the production process and is not further incorporated in some new product. Final products include consumer goods and fixed capital equipment. In a microeconomic context, value added is simply measured as the value of the output produced minus the costs of the intermediate goods.

The estimates and forecasts contained in this edition of *Prospects* were based on information available in August 2007 and consultation with industry experts and DPI&F staff. Forecasts reflect the situation of primary industries shaped by prevailing climatic conditions, but generally assume that further developments will be subject to 'average' conditions.

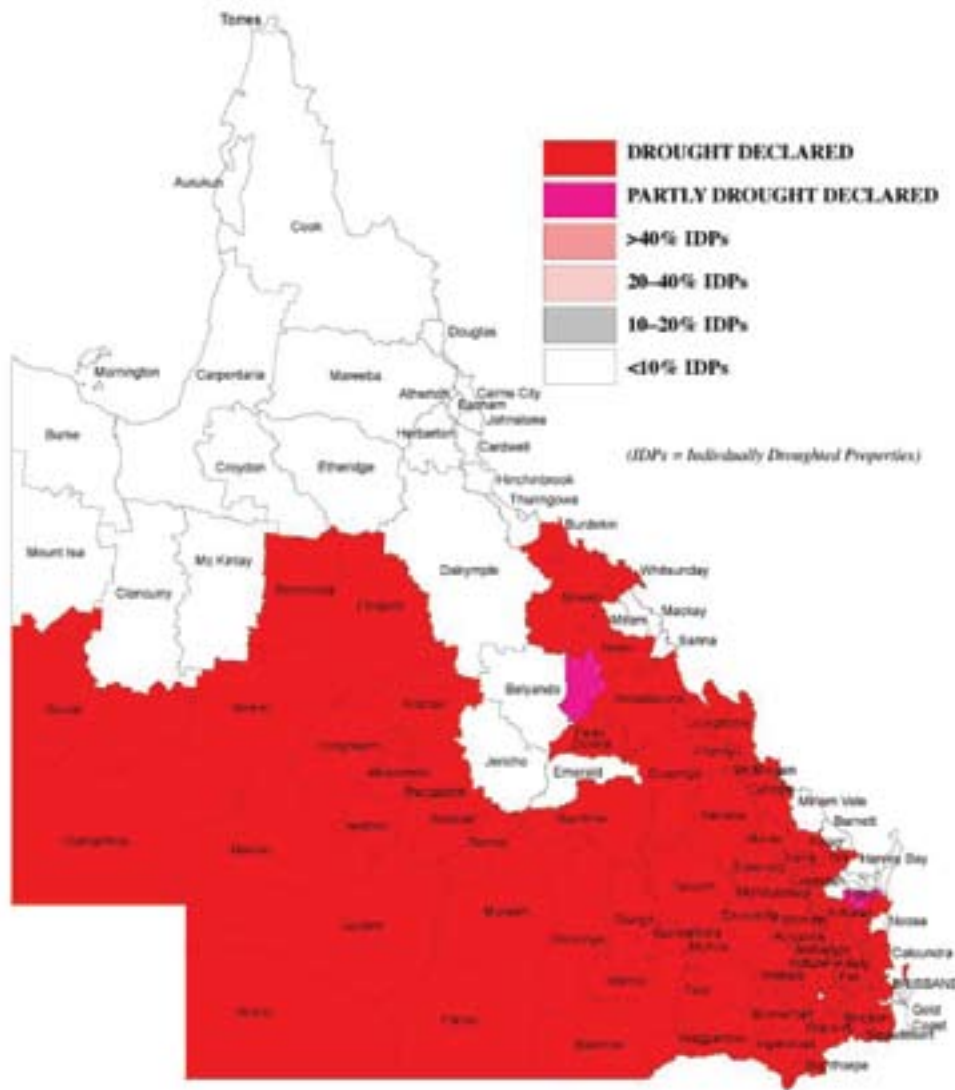
The prices of all overseas-traded commodities are responsive to changes in the exchange rate of the Australian dollar relative to the currencies of our trading partners. Prices to primary producers, and therefore gross unit values, could change depending on whether exchange rates increase or decrease.

Drought situation

As at 31 August 2007, there were 82 shires and 2 part shires drought declared under state processes, which is equivalent to 62.2% of the land area of the state. There were also 17 Individually Droughted Properties (IDPs) in a further five shires.

Generally, the southern two thirds of the state (with the exception of some coastal areas) remain drought declared.

Figure 1. Drought situation in Queensland as at 31 August 2007



Source: www.longpaddock.com.au

Climate forecast for spring/summer/autumn of 2007–08

Compared to the same time last year, there has been an improvement in the seasonal outlook for Queensland. Based on a ‘rapidly rising’ Southern Oscillation Index (SOI) phase at the end of August 2007, there is a 40% to 70% chance of getting median rainfall for September to November, with the highest rainfall probabilities (60% to 70%) found throughout Central Queensland. The exception is for the extreme far south-west of the state where there is only a 20% to 40% chance of getting median rainfall.

Based on these probabilities, there is a reasonable chance of getting some useful rainfall. For example, during September to November, Kingaroy has a 70% chance of getting at least 140 mm; Jondaryan has a 70% chance of getting at least 120 mm; Roma has a 70% chance of getting at least 100 mm; Emerald has a 70% chance of getting at least 90 mm; and St George has a 70% chance of getting at least 60 mm.

When using any probability-based forecast, the probability of something occurring is just that—a probability. If there is a 70% chance of recording more than 100 mm, there is also a 30% chance of recording less than 100 mm.

As for the rest of the spring and summer outlook, it would help if the SOI went into a ‘consistently positive’ SOI phase and remained there for a number of months. The last time the SOI was in a ‘consistently positive’ phase for more than one month was September 2000 to March 2001.

The Madden Julian Oscillation (MJO) is a band of low air pressure originating off the east coast of central Africa, travelling eastward across the Indian Ocean and northern Australia roughly every 30 to 60 days. Research has shown the MJO to be a useful indicator of the timing of potential rainfall events but not the amount that may fall. Towards the end of winter, the MJO is typically associated with monsoonal bursts over India and eastern Asia, and tropical storms, cyclones and typhoons in the South China Sea and northern western Pacific Ocean. We would usually expect to see a greater impact on northern Australian rainfall as we enter spring and summer.

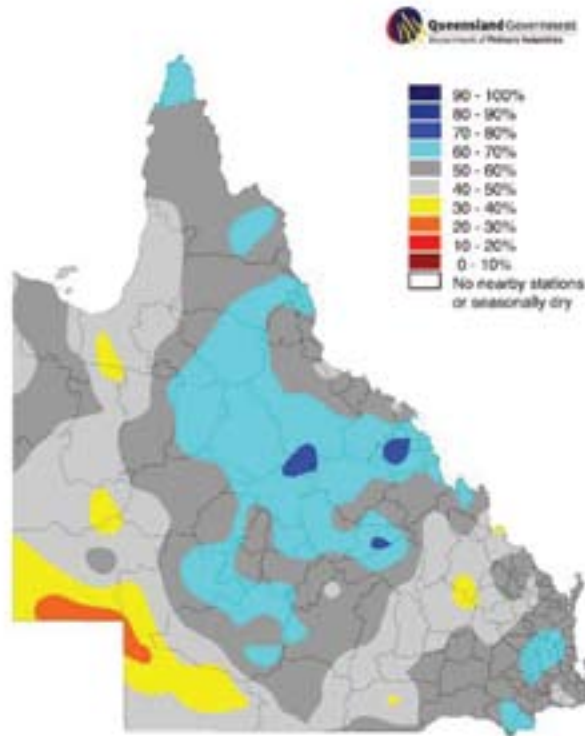
According to the Bureau of Meteorology in their ‘ENSO Wrap-up’, the past three months have seen conditions in the Pacific Ocean fluctuate. Since late July, though, there has been a gradual strengthening of La Niña indicators.

For example, eastern equatorial Pacific Ocean temperatures have continued to cool, trade winds have been mostly close to normal and the SOI has had a rise in value since July. However, for a La Niña to fully develop there needs to be further changes in our climate indicators. This would include consistently stronger than average south-east trade winds, positive SOI values (+7 or higher for several months) and further cooling of the eastern equatorial Pacific Ocean.

For our general seasonal outlook, it would also be helpful if ocean temperatures off the eastern and northern Australian coastline became warmer than normal.

While the climate models used by the Bureau of Meteorology predicted an increased chance of a La Niña developing, they also suggested the event is likely to be moderate and last only a few months. It is also now late in the year for a La Niña to develop, as (historically) most La Niña events are established before the end of winter.

Figure 2. Probability of exceeding median rainfall for September–October based on rapidly rising phase during July–August 2007



Source: www.longpaddock.com.au

Global demand for Australian commodities

In April 2007, the International Monetary Fund (IMF) forecast global gross domestic product (GDP) growth in 2007 of just under 5%, which is well above the long-term average of 3.5%. According to the Chairman of the Reserve Bank of Australia, 'there does not seem to be a high likelihood of the world economy slowing abruptly in the near term'.

While continuing worldwide economic growth is underwriting demand for commodities, the agricultural sector is still handicapped by distorted markets. The 40% improvement in Australia's terms of trade since 2003 was caused by price rises for resources leaving behind those for manufactures—but it did not apply across agriculture. The hoped-for breakthrough in the Doha round of global trade negotiations has not happened, partly due to the unwillingness of the European Union (EU) and the United States (US) to give sufficient ground on agricultural support measures and trade distortion. Although Australia has been negotiating numerous bilateral trade agreements, these do not offer the same opportunity for agricultural exporters as a global agreement could.

The Australian dollar reached more than US90c in October 2007. This puts continued pressure on agricultural exporters whose prices are typically denominated in US dollars and increases the import competition on the domestic market. The Australian Bureau of Agricultural and Resource Economics (ABARE) works on the assumption of an exchange rate of US80c per Australian dollar for 2007–08.

Table 1. Gross value of production, first-round processing and total primary industries estimates and forecasts 2005–06 to 2007–08

Commodity GVP (a)	2005–06 (c)	2006–07 (c)	2007–08 (d)	% change
	\$m	\$m	\$m	%
Livestock disposals				
Cattle and calves	3675	3625	3730	3%
Sheep and lambs (c)	50	45	55	22%
Pigs	220	210	210	0%
Poultry	230	240	255	6%
Other livestock (c)	10	10	10	0%
Total livestock disposals	4185	4130	4260	3%
Livestock products				
Wool (c)	110	110	120	9%
Milk (all purpose)	210	200	230	15%
Eggs (c)	100	100	100	0%
Total livestock products (e)	420	410	450	10%
Total livestock	4605	4540	4710	4%
Horticulture				
Fruit and nuts				
Bananas	300	400	450	13%
Pineapples	40	40	65	63%
Mangoes (c)	60	80	65	-19%
Mandarins	75	90	95	6%
Strawberries (c)	120	120	140	17%
Avocados	45	75	65	-13%
Macadamias (c)	55	40	25	-38%
Apples	35	35	45	29%
Table grapes	n/a	n/a	40	n/a
Other fruit and nuts (c)	55	95	105	11%
Total fruit and nuts	785	975	1095	12%
Vegetables				
Potatoes	35	40	40	0%
Tomatoes (c)	165	200	205	3%
Capsicums & chillies (c) (f)	80	100	95	-5%
Other vegetables (c)	460	470	430	-9%
Total vegetables	740	810	770	-5%
Total fruit and vegetables	1525	1785	1865	4%
Amenity horticulture				
Nurseries (c)	645	375	375	0%
Turf (c)	90	65	65	0%
Cut flowers and foliage (c)	130	115	105	-9%
Total amenity horticulture	865	555	545	-2%
Total horticulture	2390	2340	2410	3%

Commodity GVP (a)	2005–06 (c)	2006–07 (c)	2007–08 (d)	% change
	\$m	\$m	\$m	%
Other field crops				
Sugarcane (g)	1000	1075	730	-32%
Cotton (raw) (h)	395	120	50	-58%
Other crops	350	260	360	38%
Total other crops	1745	1455	1140	-22%
Cereal grains				
Wheat	275	240	250	4%
Barley	45	25	40	60%
Grain sorghum	140	185	340	84%
Maize	35	25	50	100%
Other cereal grains	15	15	10	-33%
Total cereal grains	510	490	690	41%
Total crops	4645	4285	4240	-1%
Total agriculture	9250	8825	8950	1%
Fisheries (c) (i)				
Trawl	100	85	85	0%
Non-trawl	85	105	105	0%
Aquaculture	65	65	75	15%
Total fisheries	250	255	265	4%
Forestry and logging (c) (j)	190	200	210	5%
Total primary industries (farm gate)	9690	9280	9425	2%
First round processing value added (h)				
Meat processing (c)	985	980	1010	3%
Sugar processing (c)	420	450	305	-32%
Milk and cream processing (c)	115	110	130	18%
Fruit and vegetables processing (c)	150	175	185	6%
Flour mill and feed processing (c)	95	95	130	37%
Seafood processing (c)	25	20	25	25%
Log sawmilling and timber dressing and plywood and veneer manufacturing (c)	330	345	360	4%
Lifestyle horticulture services (c)	615	665	660	-1%
Cotton ginning (c)	45	15	5	-67%
Total primary industries (first round processing)	2780	2855	2810	-2%
Total primary industries	12470	12135	12235	1%

(a) See glossary for definition of *gross value of commodities produced*.

(b) ABS final estimates, unless otherwise indicated. Note: (b) does not appear in this table as ABS has not yet released final estimates for 2005–06.

(c) DPI&F estimates.

(d) DPI&F forecasts.

(e) Excludes minor commodities, such as honey, beeswax, mohair.

(f) ABS estimate includes chillies.

(g) Gross value of Sugarcane at mill door.

(h) Includes value of cotton seed and lint.

(i) Includes catches from Commonwealth-managed (including Torres Strait, Gulf of Carpentaria and east coast 'tuna' fisheries) and state waters.

(j) ABARE estimates.

(h) See glossary for definition of *value added*.

Volume of production index

The volume of production index for Queensland's major agricultural commodities from 1996–97 to 2007–08 is detailed in Table 2.

In 2007–08, the production index for agriculture is forecast to be 102. This indicates that Queensland's agricultural production in 2007–08 is forecast to be 2% higher (on average) than in the base year of 1996–97.

On average, the volume of agricultural production in 2007–08 is forecast to be 1% higher than in 2006–07.

Table 2. Volume of production index for Queensland's major agricultural commodities 1996–97 to 2007–08

Volume index (a)	1996–97	1997–98	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08 (f)
Wheat	100	70	98	96	58	46	30	56	59	65	42	46
Grain sorghum	100	69	106	130	115	124	93	129	116	110	69	138
Barley	100	48	75	59	27	40	35	61	42	44	17	32
Major cereal grains	100	68	98	104	72	69	49	79	75	76	47	72
Sugarcane	100	103	100	99	77	80	95	92	93	95	89	86
Cotton lint and seed	100	116	149	151	172	119	55	103	174	137	38	33
Major other field crops	100	105	112	111	100	89	84	94	112	104	76	74
Major fruit	100	112	108	128	159	151	151	158	160	132	183	185
Major vegetables	100	96	96	100	104	108	98	127	104	126	120	108
Major fruit and vegetables	100	105	102	114	132	130	125	143	133	129	152	147
Crops	100	96	106	111	100	93	84	101	104	102	84	88
Cattle and calves + live exports	100	115	125	130	140	133	136	131	135	132	140	139
Pigs	100	108	113	111	108	113	123	132	128	124	127	103
Poultry	100	110	108	113	111	116	123	127	138	135	152	156
Sheep and lambs	100	116	119	133	143	111	84	66	68	69	72	59
Major livestock disposals	100	114	122	126	134	129	132	129	132	130	138	134
Milk (all purposes)	100	103	104	106	95	93	90	85	78	76	70	64
Wool	100	92	111	99	106	77	54	49	55	49	48	45
Eggs	100	121	118	135	141	129	136	146	163	148	201	196
Major livestock products	100	101	108	107	104	91	82	78	78	74	75	70
Livestock	100	110	118	121	126	119	119	115	118	115	121	117
Total Agriculture (b)	100	102	111	115	111	112	99	107	112	108	101	102

(a) Base of each index is 1996–97 = 100.

(b) Excludes lifestyle horticulture due to insufficient data.

(f) Forecast.

Source: Compiled by DPI&F from ABS and DPI&F data.

The indices of different commodities and groups of commodities were calculated using a simple Laspeyres Index with 1996–97 as the base year. The year 1996–97 was chosen as the base year because it is considered to be a year where average production levels were recorded for most of Queensland's major agricultural commodities.